

AMENDMENTS TO THE CLAIMS

1-4 (Cancelled)

5. (Currently Amended) A refrigeration system comprising:

(A) a storage unit having a storage space;

(B) a purge gas generator, a gas contaminant cleaning system,
a heat exchanger, a cryocooler having a cold head, means for passing gas from
the purge gas generator to the gas contaminant cleaning system, means for
passing gas from the gas contaminant cleaning system to the heat exchanger
and then from the heat exchanger to the cold head of the cryocooler, and means
for passing fluid from the cold head of the cryocooler into the storage space; and

(C) ~~a gas contaminant cleaning system,~~ and means for passing
gas from within the storage space to the heat exchanger and then from the heat
exchanger to the gas contaminant cleaning system.

6. (Cancelled)

7. (Original) The refrigeration system of claim 5 wherein the gas
contaminant cleaning system comprises an ejector.

8. (Original) The refrigeration system of claim 5 wherein the purge
gas generator comprises an air compressor and an air cleaning system.

9. (Original) The refrigeration system of claim 5 wherein the purge
gas generator comprises a membrane nitrogen generator.

10. (Cancelled)

11. (Original) The refrigeration system of claim 5 wherein the
cryocooler is a pulse tube refrigerator comprising a pressure wave generator, and
a pulse tube containing working gas for receiving a pressure wave from the
pressure wave generator.

12. (New) The refrigeration system of claim 5 wherein the means for passing gas from the heat exchanger to the gas contaminant cleaning system communicates with means for venting gas to the atmosphere.

13. (New) The refrigeration system of claim 5 wherein the storage space contains biological material.